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Hale Mary
8/10/07

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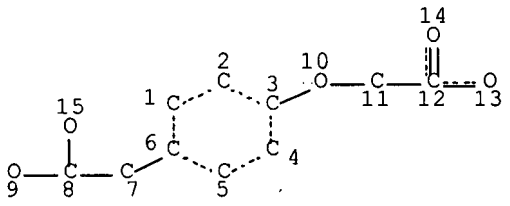

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NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 461 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.01

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FILE 'BIOSIS' ENTERED AT 08:38:00 ON 10 AUG 2007
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FILE 'CAPLUS' ENTERED AT 08:38:00 ON 10 AUG 2007
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L4 0 FILE MEDLINE
L5 0 FILE BIOSIS
L6 0 FILE EMBASE
L7 3 FILE CAPLUS

TOTAL FOR ALL FILES
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L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1173156 CAPLUS Full-text
DOCUMENT NUMBER: 145:489007
TITLE: Crystals of hydroxynorephedrine derivative hydrochloride 1/4 hydrate
INVENTOR(S): Isawa, Hidetoshi; Toda, Michio
PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 22pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006118087	A1	20061109	WO 2006-JP308591	20060424

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

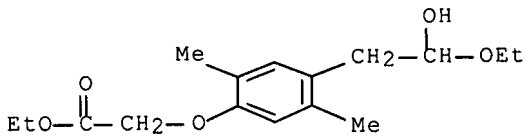
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2005-128731 A 20050426

AB Claimed are Et (-)-2-[4-[2-[[1S,2R]-2-hydroxy-2-(4-hydroxyphenyl)-1-methylethyl]amino]ethyl]-2,5-dimethylphenoxyacetate hydrochloride 1/4 hydrate (I) and I crystals. I crystals were obtained by reaction of 2-[4-(2-bromoethyl)-2,5-dimethylphenoxy]acetic acid Et ester with (1R,2S)-p-hydroxynorephedrine, followed by workup, treatment of the product in toluene with ethanol containing HCl, collection of I crystals, and drying. I crystals showed high solubility in water and high storage stability. I is used for the treatment of urinary incontinence and frequent urination (no data).

IT 476333-90-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of crystals of hydroxynorephedrine derivative hydrochloride 1/4
hydrate for treatment of urinary incontinence and frequent urination)

RN 476333-90-1 CAPLUS
CN Acetic acid, [4-(2-ethoxy-2-hydroxyethyl)-2,5-dimethylphenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:410227 CAPLUS Full-text
DOCUMENT NUMBER: 144:450508
TITLE: Synthesis of phenoxyacetic acid derivatives
INVENTOR(S): Winter, Eric; Reichel, Carsten; Gutheil, Dieter
PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany; Boehringer Ingelheim Pharma Gmbh & Co. KG
SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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WO 2006045519	A1	20060504	WO 2005-EP11269	20051020
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US 2007088174	A1	20070419	US 2005-253311	20051019
CA 2585037	A1	20060504	CA 2005-2585037	20051020
EP 1809591	A1	20070725	EP 2005-799211	20051020
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				

PRIORITY APPLN. INFO.: EP 2004-25432 A 20041026
WO 2005-EP11269 W 20051020

OTHER SOURCE(S): CASREACT 144:450508; MARPAT 144:450508
GI

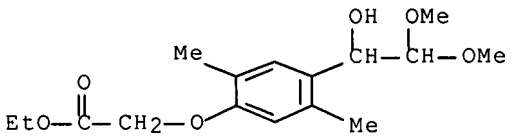
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Phenoxyacetic acid derivs. [I; R1 = (un)branched C1-6 alkyl, H; X1, X2 = C1-6 alkyl; e.g., Et (-)-2-[4-[2-[[(1S,2R)-2-hydroxy-2-(4-hydroxyphenyl)-1-methylethyl]amino]ethyl]-2,5-dimethylphenoxy]acetate hydrochloride, m.p. 196-197°] are prepared in high yield and selectivity by: (A) etherification of an acetal-containing phenol [II; R2 = (un)branched C1-6 alkyl; CR2R2 = 5- or 6-membered ring] with a carboxylate ester ZCH2CO2R1 (Z = leaving group) to give the acetal-containing phenoxyacetate (III); (B) reductively converting the acetal into an aldehyde (IV); (C) reductively aminating the aldehyde with 1-(4-hydroxyphenyl)-1-hydroxy-2-propylamine, preferably, 4-hydroxynorephedrine to give the corresponding free base I; and (D) optional salification of the fee base with a pharmaceutically acceptable salt.

IT 476333-88-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(in the synthesis of phenoxyacetic acid derivs.)

RN 476333-88-7 CAPLUS

CN Acetic acid, [4-(1-hydroxy-2,2-dimethoxyethyl)-2,5-dimethylphenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:900773 CAPLUS Full-text
DOCUMENT NUMBER: 137:384652
TITLE: Preparation of β3-adrenoceptor-stimulating phenoxyacetates and their intermediates
INVENTOR(S): Tanaka, Nobuyuki; Tamai, Tetsuo; Mukaiyama, Harunobu; Ishikawa, Takehiro; Kobayashi, Junichi; Akaba, Satoshi; Harada, Hiroshi
PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

applicants

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002338513	A	20021127	JP 2002-64840	20020311
CA 2494176	A1	20040401	CA 2002-2494176	20020905
WO 2004026807	A1	20040401	WO 2002-JP9034	20020905
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002328538	A1	20040408	AU 2002-328538	20020905
EP 1535897	A1	20050601	EP 2002-760810	20020905
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BR 2002015859	A	20050705	BR 2002-15859	20020905
SI 21701	A	20050831	SI 2002-20043	20020905
CN 1668572	A	20050914	CN 2002-829566	20020905
HU 200500596	A2	20060828	HU 2005-596	20020905
NZ 538535	A	20060831	NZ 2002-538535	20020905
MX 2005PA02459	A	20050603	MX 2005-PA2459	20050303
US 2006135605	A1	20060622	US 2005-526660	20050304
LV 13337	B	20060120	LV 2005-25	20050330
NO 2005001683	A	20050405	NO 2005-1683	20050405
PRIORITY APPLN. INFO.:			JP 2001-68023 A	20010312
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OTHER SOURCE(S): MARPAT 137:384652
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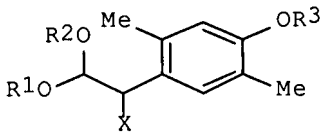

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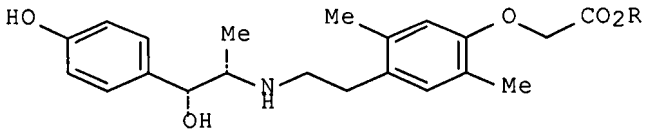
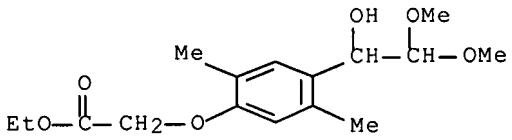


II

AB Dimethylbenzenes I (R1 = lower alkyl; R2 = lower alkyl, H; R3 = H, CH2CO2R; R = lower alkyl; X = H, OH) are prepared as intermediates for the phenoxyacetates II (R = lower alkyl) or their salts. 2,5-Xylenol (100 g) was treated with glyoxal di-Me acetal and NaOH in H2O at 55° for 5 h to give 150 g I (R1 = R2 = Me, R3 = H, X = OH), which was converted into II (R = Et) in 4 steps.

IT 476333-88-7P 476333-89-8P 476333-90-1P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of β3-adrenoceptor-stimulating phenoxyacetates and their intermediates)

RN 476333-88-7 CAPLUS
CN Acetic acid, [4-(1-hydroxy-2,2-dimethoxyethyl)-2,5-dimethylphenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 476333-89-8 CAPLUS
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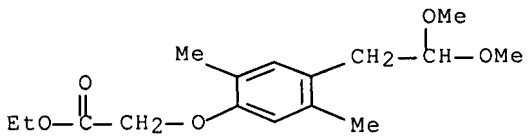

RN 476333-90-1 CAPLUS
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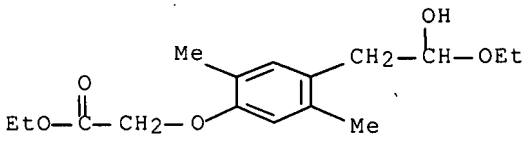

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TOTAL FOR ALL FILES

L13	16851	TANAKA N?/AU

L14	177	FILE MEDLINE
L15	259	FILE BIOSIS
L16	146	FILE EMBASE
L17	613	FILE CAPLUS

TOTAL FOR ALL FILES

L18	1195	TAMAI T?/AU

L19	23	FILE MEDLINE
L20	33	FILE BIOSIS
L21	26	FILE EMBASE
L22	99	FILE CAPLUS

TOTAL FOR ALL FILES

L23	181	MUKAIYAMA H?/AU

L24	3058	FILE MEDLINE
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L26	2623	FILE EMBASE
L27	9326	FILE CAPLUS

TOTAL FOR ALL FILES

L28	18649	ISHIKAWA T?/AU

L29	923	FILE MEDLINE
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TOTAL FOR ALL FILES

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L39        1075 FILE MEDLINE
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L41        1025 FILE EMBASE
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TOTAL FOR ALL FILES
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TOTAL FOR ALL FILES
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STRUCTURE FILE UPDATES:    9 AUG 2007  HIGHEST RN 944380-35-2
DICTIONARY FILE UPDATES:   9 AUG 2007  HIGHEST RN 944380-35-2

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predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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L26        2623 SEA ABB=ON  PLU=ON  ISHIKAWA T?/AU
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L31         892 SEA ABB=ON  PLU=ON  KOBAYASHI J?/AU
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L37          83 SEA ABB=ON  PLU=ON  AKAHANE S?/AU
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L42          3968 SEA ABB=ON  PLU=ON  HARADA H?/AU
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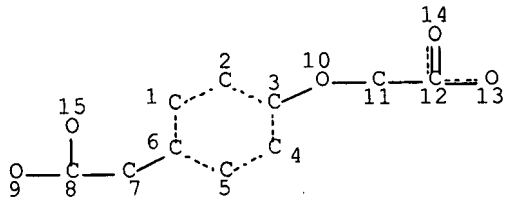


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NODE ATTRIBUTES:
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS  15

STEREO ATTRIBUTES: NONE
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